

2.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” (prior to mitigation) as indicated by the checklists on the following pages.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input checked="" type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology / Soils
<input type="checkbox"/> Hazards & Hazardous Materials	<input type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning
<input type="checkbox"/> Mineral Resources	<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing
<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation/Traffic
<input type="checkbox"/> Utilities / Service Systems		

2.2 DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____

Date _____

Eric Gillies, Staff Environmental Scientist
California State Lands Commission

2.3 EVALUATION OF ENVIRONMENTAL IMPACTS

ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.1. AESTHETICS - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				X
(a) Have a substantial adverse effect on a scenic vista?				
(b) Damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

SETTING

The proposed pipeline relocation project (Project) is located on interior roads of the Bolsa Chica Lowlands. The Bolsa Chica Lowlands are a remnant of what was at one time a 2,300-acre estuary and saltmarsh with an associated area of freshwater marsh. As noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, (SCH # 2000071068) the existing site conditions are due to the tidal water restriction from the early 1900s, oil development dating from the 1940s, and construction of the East Garden Grove-Wintersburg (EGGW) Flood Control Channel in 1960. The overall Bolsa Chica Lowlands area consists of a series of diked ponds, roads, oil production wells and associated pipelines. Vegetation, where present, is predominantly pickleweed or non-native weedy species. Scenic resources in the area of the Lowlands include Bolsa Chica State Beach, the Pacific Ocean, and views of Catalina Island. The Bolsa Chica Lowlands are generally flat, sloping upwards toward the mesa areas which are located mainly along the northeastern, northern and southern borders of the Lowlands.

As noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, the restoration area, which includes the future full tidal restoration area, is visible from areas accessible to the general public as well as privately owned properties. The general public has views of the project are from the proposed Harriett M. Weider Regional Park, within the Bolsa Chica Ecological Reserve, and limited views from PCH. The restoration area is also visible from privately held parcels, including Edwards Thumb (an area of the lowlands immediately south of Edwards Street) , a portion of Huntington Beach Mesa which is under construction for residential development (The Bluffs), and the single

family residences abutting the east side of the project site located between the EGGW Flood Control Channel and Edwards Thumb.

IMPACT DISCUSSION

a, c) The proposed Project involves installation of approximately 4,700 linear feet (0.9 miles) of new 12" diameter pipe adjacent to existing unpaved and elevated roads (Road 70 and Rattlesnake Road) within the Lowlands. This area is not directly visible from Bolsa Chica State Beach, Huntington Beach, or the Pacific Coast Highway (PCH) (see Figures 2 and 4). Existing private residential areas are located along the bluffs adjacent to the Bolsa Chica general area. However, the nearest residences are over 2,000 feet from the pipeline relocation area. The segments of Rattlesnake Road and Road 70 within the project site may be visible from the 1.5-mile recreation trail located in the Ecological Reserve area, which is accessible from PCH. As the Ecological Reserve trail is located approximately one quarter to one-half mile northwest of the Project site, views from the trail will be minimally affected by the temporary construction associated with the relocation Project. Moreover, the Project site is routinely used for utility maintenance and monitoring; project construction will not cause any long-term aesthetic impacts.

The 2001 Restoration Project EIR/EIS notes that public viewing opportunities are proposed to be developed as part of the Restoration Project along the perimeter of the wetlands. However, no trail along the perimeter of the future full tidal basin would be possible until oil operations in the area have ceased; therefore no impacts to view corridors would be affected during the short-term construction of the relocation Project.

The Project will involve short-term construction work, anticipated to last less than six weeks for both the associated pipeline removal and the proposed pipeline relocation work. The overall visual character of the segments of Rattlesnake Road and Road 70 within the project site will not change as these roads are already used for pipelines infrastructure, as shown in the photos in Figure 5a and 5b, and are routinely used for pipeline access, maintenance vehicles and other associated uses. The Project will not affect scenic views of Bolsa Chica State Beach, the Pacific Ocean, and Catalina Island as the Bolsa Chica Wetland area is generally flat and the relocated pipeline will be placed at ground level. The approximately 12' high earthen berms that are to be constructed as part of the Lowlands Restoration Project will limit views of the project site from the recreational trail and PCH, thereby minimizing the impact to views from these locations. The associated removal of the pipeline, part of the Bolsa Chica Lowlands Restoration Project, will remove the approximately 0.9 mile segment of 12 " pipeline out of the wetland area to the adjacent road way, and thus have a beneficial impact on views. No significant impact to scenic vistas or scenic resources is anticipated

b) The Project involves the pipeline relocation along Rattlesnake Road and Road 70, which are existing dirt roadways within an interior part of the Bolsa Chica Lowlands. There are no scenic resources or historic buildings within the project site; thus, the Project will have no impact.

d) The Project involves the relocation of a pipeline and will not introduce a substantial source of light or glare. The Project will have no effect on day or nighttime views in the area. No impacts will occur.

MITIGATION MEASURES

No significant impacts would result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.2 AGRICULTURE RESOURCES - Would the project:				
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to nonagricultural use?				X
(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
(c) Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?				X

SETTING

The Project is located on Rattlesnake Road and Road 70 in the Bolsa Chica Lowlands. The Bolsa Chica Lowlands are located in an area of urban development. Residential areas surround the site to the north, east, and south. To the west of the Lowlands are the Pacific Coast Highway, Bolsa Chica State Beach, and the Pacific Ocean.

IMPACT DISCUSSION

a) There are no agricultural areas on or near the Project site. The Project is located along dirt roadways within the Bolsa Chica Lowlands, which is surrounded by residential uses and a state beach. The Project will have no impact on Prime, Unique Farmlands or Farmlands of Statewide Importance, or result in conversion of use.

b) There are no areas of agricultural zoning, agricultural use or areas under Williamson Act contract on or near the Project site. No impacts will occur.

c) The Project involves relocating a 0.9 mile segment of a natural gas pipeline to portions of Rattlesnake Road and Road 70. There is no farmland on or adjacent to the project site. Therefore, the proposed Project will not involve any changes that could result in the loss of farmland or result in non-agricultural use. No impacts will occur.

MITIGATION MEASURES

No significant impacts would result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.3 AIR QUALITY - Would the project:				
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan or Congestion Management Plan?			X	
b) Violate any stationary source air quality standard or contribute to an existing or projected air quality violation?			X	
c) Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d) Create or contribute to a non-stationary source "hot spot" (primarily carbon monoxide)?			X	
e) Expose sensitive receptors to substantial pollutant concentrations?			X	
f) Create objectionable odors affecting a substantial number of people?			X	

SETTING

Local Climate and Meteorology. The pipeline relocation project is located in the Bolsa Chica Lowlands in the unincorporated area of Orange County, which is part of the South Coast Air Basin, and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The physical and regulatory air quality setting of the area is described in detail in the South Coast Air Quality Management Plan (AQMP) and the Air Quality Assessment Guidelines (August 2003).

Regulatory Jurisdiction. The federal and State governments have been empowered by the Federal and State Clean Air Acts (CAA) to regulate the emission of airborne pollutants and have established ambient air quality standards to the protection of public health. The U.S. Environmental Protection Agency (US EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (ARB) is the State equivalent in the California Environmental Protection Agency (Cal EPA). Local control in air quality management is provided by the ARB through county level Air Pollution Control Districts (APCDs). The ARB has established air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulation stationary sources. The ARB has established 14 air basins statewide. The project site is located in the South

Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District, a multi-county APCD.

Air Quality Standards. The U.S. EPA has set primary and secondary ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), suspended particulates less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}) and lead (Pb). The State of California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles.

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Table 2.3.3-1 lists the current ambient air quality standards. Table 2.3.3-2 compares ambient air quality in the area to State and federal standards. The South Coast Air Quality Management District Governing Board adopted the 2003 Air Quality Management Plan (AQMP) on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the federal standards for ozone and particulate matter (PM₁₀); replaces the 1997 attainment demonstration for the federal carbon monoxide (CO) standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal nitrogen dioxide (NO₂) standard that the South Coast Air Basin (Basin) has met since 1992 (SCAQMD 2003).

The SCAQMD is required to monitor air pollutant levels to ensure that the air quality standards in Table 2.3.3-1 are met and, in the event that they are not in compliance, to develop strategies to meet these standards. The local air basin is classified as being in attainment if the standards have not been exceeded during the past three-year period.

Table 2.3.3-1 Current Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.12 ppm (1-hr avg) 0.08 ppm (8-hr avg)	0.09 ppm (1-hr avg)
Carbon Monoxide	9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)	9.0 ppm (8-hr avg) 20.0 ppm (1-hr avg)
Nitrogen Dioxide	0.053 ppm (annual avg)	0.25 ppm (1-hr avg)
Sulfur Dioxide	0.03 ppm (annual avg) 0.14 ppm (24-hr avg) 0.5 ppm (3-hr avg)	0.04 ppm (24-hr avg) 0.25 ppm (1-hr avg)
Lead	1.5 $\mu\text{g}/\text{m}^3$ (calendar qtr)	1.5 $\mu\text{g}/\text{m}^3$ (30-day avg)
Particulate Matter (PM_{10})	50 $\mu\text{g}/\text{m}^3$ (annual avg) 150 $\mu\text{g}/\text{m}^3$ (24-hr avg)	20 $\mu\text{g}/\text{m}^3$ (annual avg) 50 $\mu\text{g}/\text{m}^3$ (24-hr avg)
Particulate Matter ($\text{PM}_{2.5}$)	15 $\mu\text{g}/\text{m}^3$ (annual avg) 65 $\mu\text{g}/\text{m}^3$ (24-hr avg)	12 $\mu\text{g}/\text{m}^3$ (annual avg)

ppm = parts per million

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

Source: California Air Resources Board, www.arb.ca.gov/aqs/aaqs2.pdf, December, 2003.

Table 2.3.3-2 Ambient Air Quality Data

Pollutant	2000	2001	2002
Ozone, ppm - Worst Hour	0.18	0.19	0.17
Number of days of State exceedances (>0.09 ppm)	115	121	116
Number of days of Federal exceedances (>0.12 ppm)	33	36	35
Carbon Monoxide, ppm - Worst 8 Hours	6.29	4.64	4.29
Number of days of State/Federal exceedances (>9.0 ppm)	0	0	0
Nitrogen Dioxide, ppm - Worst Hour	0.107	0.082	0.106
Number of days of State exceedances (>0.25 ppm)	0	0	0
Particulate Matter <10 microns, $\mu\text{g}/\text{m}^3$ Worst 24 Hours ^a	126	93	69
Number of samples of State exceedances (>50 $\mu\text{g}/\text{m}^3$)	8	9	5
Number of samples of Federal exceedances (>150 $\mu\text{g}/\text{m}^3$)	0	0	0
Annual Geometric Mean (State standard = 30 $\mu\text{g}/\text{m}^3$)	35	33	31
Annual Arithmetic Mean (Federal standard = 50 $\mu\text{g}/\text{m}^3$)	39	28	33
Particulate Matter < 2.5 microns, $\mu\text{g}/\text{m}^3$ Worst 24 Hours ^a	113.9	70.8	68.6
Number of days of Federal exceedances (15 $\mu\text{g}/\text{m}^3$ (annual avg))	6	1	1

Source: ARB, 2000, 2001, & 2002 Annual Air Quality Data Summaries available at <http://www.arb.ca.gov>

All data from Costa-Mesa Mesa Verde Drive Monitoring Station except for particulate matter

^a Anaheim-Harbor Monitoring Station

IMPACT DISCUSSION

a) The Project involves short-term construction for the installation of the segment of pipeline and associated activities. The Project will not obstruct implementation of either the South Coast Air Basin (SCAB) AQMP or the Congestion Management Plan for intersections in the area of the Project. As noted in the 2001 Restoration Project EIR/EIS, the Lowlands Restoration Project, which includes the associated Line 1228 pipeline removal, will not curtail the SCAB Basin from meeting the AQMP goals for attainment of federal ozone and PM₁₀ as construction and associated activity will be completed well before the year 2010 attainment date set by the AQMP. Similarly, the pipeline relocation will be completed well before 2010 and operation of the pipeline will have no long-term impact upon regional air quality. Therefore, the Project will not affect implementation of the AQMP or Congestion Management Plan. Impacts would be less than significant.

b-d) South Coast AQMD threshold values for operational and construction emissions are shown in Table 2.3.3-3. The Project will not generate any air pollutant emissions in the long-term; therefore, the SCAQMD operational thresholds are not applicable. However, Project construction will generate temporary emissions.

Table 2.3.3-3 SCAQMD Thresholds of Significance (pounds per day)

Pollutant	Construction	Operational
NOx	75	55
ROG	100	55
CO	550	550
Particulate Matter (PM ₁₀)	150	150
SOx	150	150

Source: South Coast Air Quality Management District, 2003.

Construction emissions were calculated for the proposed project using the California ARB, June 1999 "Emission Inventory of Off-Road Large Compression-Ignited Engines (>25 hp) Using the New OFFROAD Emissions Model (see Appendix A for calculations). Based on typical equipment that would be used for pipeline installation, it was assumed that two crews of four heavy equipment vehicles would be at the site, including a backhoe, a water truck, and pipe laying equipment. Work is expected to take approximately six weeks for the associated pipeline removal as well as the proposed pipeline relocation activities.

Table 2.3.3-4 shows estimated average daily emissions associated with Project construction. As indicated, daily construction emissions are estimated to remain well below SCAQMD thresholds for all pollutants. Therefore, construction impacts are not considered significant.

Table 2.3.3-4 Worst Case Daily Construction Emission (pounds per day)

Source	Pounds per day			
	NO _x	ROG	CO	PM ₁₀
Heavy equipment	54.7	2.8	13.7	-
Fugitive Dust	-	-	-	2.9
<i>Significance Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>

*Source: California ARB, June 1999 "Emission Inventory of Off-Road Large Compression-Ignited Engines (>25 hp) Using the New OFFROAD Emissions Model.
see Appendix A for calculations*

Although the proposed Project's impact to air quality will not be significant, adherence to the mitigation measures included as AQ 1a-e below, from the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS relating to construction emissions, will further reduce emissions to the extent possible. Such measures include, but are not limited to: (1) application of water on bare surfaces during construction; (2) requiring emissions control from onsite equipment through a routine program of low-emissions tune-ups; and (3) termination of soil disturbance when high winds (>25 mph) make dust control difficult. Implementation of these standard measures will reduce impacts to less than significant. SCAQMD (Rule 431.2) and California ARB (California Diesel Fuel Regulations) regulate sulfur content of diesel and other liquid fuels for the purpose of reducing the formation of sulfur oxides and particulates. ARB regulations have been in effect since 1993, and require a reduction in diesel engines and equipment by 80% of SO_x content; SO_x emissions from construction vehicles at the project site will be less than significant.

e) The sensitive receptors nearest the Project site are the residential areas to the north, east, and south of the Bolsa Chica Lowlands, which are over 0.4 miles from the Project site at the closest point. As discussed in items (b) through (d) above, Project construction will not produce emissions that exceed SCAQMD thresholds. The Project will not produce any long-term increase in air pollutant emissions. Therefore, significant impacts to sensitive receptors will not occur.

f) The Project will involve short-term construction, less than six weeks for both the associated removal and the proposed relocation of the pipeline. The construction may create minor odors; however, construction would last only about six weeks and the nearest sensitive receptors are over 2,000 feet away. In addition, as discussed above, construction-related emissions will be well below SCAQMD significance thresholds. Therefore, impacts are not considered significant.

MITIGATION MEASURES

The following mitigation measures for construction emissions and fugitive dust impacts from the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS are incorporated into the proposed Project:

- AQ-1a** All construction equipment shall be maintained in good operating condition to reduce operational emissions. The contractor shall ensure that all construction equipment is properly serviced and maintained in accordance with the manufacturers' specifications.
- AQ-1b** Where applicable, equipment and trucks shall not be left idling for prolonged periods (i.e., in excess of 5 minutes).
- AQ-1c** To the extent feasible, truck deliveries both to and from the site shall be limited to off peak hours.
- AQ-1d** To the extent reasonably feasible, the contractor shall use available sources of onsite electrical power to operate any required small-scale equipment.
- AQ-1e** The disturbed areas above the mean high tide line shall be revegetated within 30 days of the cessation of disturbance activities.

With the BMPs for dust control in the Project Description and compliance with the mitigation measures contained in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS the potential for air quality impacts will be reduced to a level that is less than significant.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.4 BIOLOGICAL RESOURCES- Would the project:				
a) Adversely impact, either directly or through habitat modifications, any endangered, rare, or threatened species, as listed in Title 14 of the California Code of Regulations (§670.2 or 670.5) or in Title 50, Code of Federal Regulations (§17.11 or 17.12)?			X	
b) Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	

d) Adversely impact federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?			X	
e) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?			X	
f) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
g) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				X

SETTING

Biological field surveys were conducted on October 21, 2003, and November 12, 2003, to re-confirm the findings of the Bolsa Chica Lowlands Restoration Project EIR/EIS as applicable to the proposed pipeline relocation Project. The findings of these surveys and the associated literature review are discussed below.

Vegetation. The project site is located along unpaved roadside and highly disturbed marsh edging along the road. The dominants in the vegetated area immediately adjacent to the elevated roadside are non-native iceplant and crystalline iceplant with some patches of native vegetation, predominantly pickleweed and saltgrass. Pickleweed and saltgrass become the dominants as the elevation decreases and distance from the road increases. Species less frequently observed included telegraph weed, Menzies' goldenbush, coyote brush, heliotrope, alkali heath, alkali weed, nightshade, bulrush, and cocklebur. Non-native Russian thistle, poison hemlock, horseweed, radish, rabbitfoot grass, bristly ox-tongue, myoporum, and curly dock were also present. Table 2.3.4-1 lists the plant species observed at the project site.

Table 2.3.4-1 Vegetation Observed at the Project Site

Species	Common Name
<i>Baccharis pilularis</i>	coyote brush
<i>Carpobrotus sp.</i>	non-native iceplant
<i>Conium maculatum</i>	poison hemlock
<i>Conyza sp.</i>	horseweed
<i>Cressa truxillensis</i>	alkali weed
<i>Distichlis spicata</i>	saltgrass
<i>Frankenia salina</i>	alkali heath
<i>Heliotropium sp.</i>	heliotrope
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Isocoma menziesii</i>	Menzies' goldenbush
<i>Mesembryanthemum crystallinum</i>	crystalline iceplant
<i>Myoporum sp.</i>	myoporum
<i>Picris echioides</i>	bristly ox-tongue
<i>Polypogon sp.</i>	rabbitfoot grass
<i>Raphanus sativus</i>	radish
<i>Rumex sp.</i>	curly dock
<i>Salicornia virginica</i>	pickleweed
<i>Salsola tragus</i>	Russian thistle
<i>Scripus sp.</i>	bulrush
<i>Solanum sp.</i>	nightshade
<i>Xanthium sp.</i>	cocklebur

Wildlife. The most abundant wildlife or wildlife sign observed within 500' of the site during the initial site visits in September and October 2003 were wandering skipper (previous Federal Species of Concern), western pygmy-blue butterfly, house finch, California ground squirrel burrows, pocket gopher sign, unidentified small rodent burrows, and unidentified canid tracks (coyote or domestic dog). Table 2.3.4-2 lists the wildlife species observed in the immediate vicinity (500 feet) of the Project footprint during the Fall 2003 field visits. Many other species are present in the greater Bolsa Chica Lowlands, as indicated in Section 3.5 of the Bolsa Chica Lowlands Restoration Project EIR/EIS, and have the potential to at least occasionally be present along the pipeline alignment.

Table 2.3.4-2 Wildlife Noted at the Project Site

Species	Common Name
<i>Panquina</i> sp.	wandering skipper
<i>Brephidium exile</i>	western pygmy-blue butterfly
<i>Uta stansburiana</i>	side-blotched lizard
<i>Podiceps nigricollis</i>	eared grebe
<i>Ardea herodias</i>	great blue heron
<i>Anas clypeata</i>	northern shoveler
<i>Falco sparverius</i>	American kestrel
<i>Himantopus mexicanus</i>	black-necked stilt
<i>Sayornis saya</i>	Say's phoebe
<i>Sturnella neglecta</i>	western meadowlark
<i>Carpodacus mexicanus</i>	house finch
<i>Citellus beecheyi</i>	California ground squirrel
<i>Thomomys bottae</i>	pocket gopher
<i>Sylvilagus auduboni</i>	Audubon's cottontail rabbit
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow

Special Status Species/Communities. Special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Federal Endangered Species Act (FESA); those considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Game (CDFG) under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern" by the CDFG; and plants occurring on lists 1B and 2 of the CNPS's Inventory of Rare and Endangered Vascular Plants of California, Sixth Edition (as included in the CDFG CNDDDB Special Vascular Plants, Bryophytes, and Lichens List, October 2003). Per the CNPS code definitions: List 1A species include those presumed extinct in California, 1B are those that are rare, threatened or endangered in CNPS's opinion in California and elsewhere, and List 2 includes plants rare, threatened, or endangered in California, but more common elsewhere. List 3 species are a review list for which necessary information is lacking to assign them to one list or another or to reject them. List 4 species are of limited distribution or infrequent throughout a broader range of California and their vulnerability or susceptibility to threat appears low at this time. Therefore, List 3 and 4 plants are not considered "special status species" as used in this discussion. In addition, local agencies may consider and list additional plants to be of "local concern" because of local or regional scarcity as determined by that agency (per the State CEQA Guidelines Section 15380).

Based on the findings of the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, site conditions, information on species presence from USFWS (Jack Fancher, October-December 2003), the species listed in Table 2.3.4-3 below were considered during

biological surveys. Only those species documented to be present or anticipated to utilize the project site are shaded in gray for reference.

Table 2.3.4-3 Special-Status Species Considered at the Project Site

Species	Common Name	Federal/State/ Local Status ¹	Comments ²
Vegetation			
<i>Salicornia virginica</i>	pickleweed	--/--/CDFG	Habitat for Belding's savannah sparrow/wetland indicator
<i>Centromadia parryi</i> ssp. <i>australis</i>	Southern tar plant	--/--/CNPS 1B	Marginal habitat along road edge, not expected or observed
<i>Cordylanthus maritimus</i> spp. <i>maritimus</i>	salt marsh bird's beak	FE/SE/CNPS 1B	Marginal habitat along wetland fringe, not expected or observed
Birds			
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	--/SE/--	Documented nester in pickleweed near project; observed foraging within 100 feet in adjacent wetland areas
<i>Charadrius alexandrinus nivosus</i>	western snowy plover (nesting)	FT, USFWS BCC/CSC/--	Potential nester in mudflats/sand near pipeline; documented within 200 feet of removal area
<i>Poliophtila californica californica</i>	California gnatcatcher	FT/CSC/--	Documented in adjacent mesas, AERA heliport area, highly unlikely to be onsite
<i>Sterna antillarum browni</i>	California least tern (nesting colony)	FE/SE/CDFG FP	Nesting colony not located near relocation site
<i>Aimophila ruficeps canescens</i>	Southern California rufous crowned sparrow	--/CSC/--	Present in adjacent mesas, AERA heliport area, not anticipated to be present onsite
<i>Sterna elegans</i>	Elegant tern (nesting colony)	FSC, USFWS BCC/CSC/--	Nesting colony not located near relocation site
<i>Lanius ludovicianus</i>	Loggerhead shrike nesting	FSC, USFWS BCC/CSC/--	Species documented in adjacent mesas, AERA heliport area; nesting is not anticipated in or near site
<i>Athene cunicularia</i>	burrowing owl (nesting site)	FSC, USFWS BCC/CSC/--	No suitable burrows were observed onsite

¹ CDFG=CDFG requires minimization of impacts to pickleweed at the project site; CDFG FP= Fully Protected; CNPS List 1B= Plants that are rare, threatened, or endangered in California and elsewhere, CSC=California Species of Concern; FE= Federal Threatened; FSC=Federal Species of Concern; FT= Federal Threatened; SE=State Endangered; and USFWS BCC= USFWS Birds of Conservation Concern.

² Sources: Bolsa Chica Lowlands Restoration Project EIR/EIS; Rincon Consultants, July, October, November 2003 Site Visits; CDFG California Natural Diversity Database October 2003.

Pickleweed, while not contained on State or federal lists as a rare species because of its abundance, is considered a special status vegetation at the site because it is the

primary indicator of saltmarsh conditions and provides the primary habitat for nesting for the Belding's savannah sparrow. No other special-status vegetation has been observed and none is expected in the project footprint due to the current and historical disturbance in the area.

Special-status wildlife observed during Fall 2003 surveys included 11 Belding's savannah sparrow perching/foraging in adjacent wetland areas along the northern half of Road 70 and the eastern terminus of Rattlesnake Road (Cells 30 and 44 of the EIR). The closest individual was observed within 100' of the project site. Nesting has been documented in the areas adjacent to the Project footprint (Table 3.5-12, Bolsa Chica Lowlands Restoration Project EIR/EIS). Due to the frequent vehicular traffic along the Project alignment and the limited and disturbed pickleweed present, no nesting is anticipated to occur onsite. Belding's savannah sparrow could nest within 50' feet of the Project in the adjacent wetland areas.

Although not observed during site visits, western snowy plover is also anticipated to be present in the greater project area. USFWS regularly monitors Bolsa Chica for western snowy plover. The 2003 USFWS survey documented snowy plovers nesting in cells 18 and 19 and within approximately 250 feet of the project site at the closest point, as shown in Figure 6. Due to the frequent heavy vehicle traffic along the Project alignment, no nesting is anticipated to occur onsite.

Other nesting birds protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code could potentially nest onsite. None were observed during the site visits. Given the ongoing disturbance in the area, nesting is considered unlikely.

Jurisdictional Areas. The proposed Project is located within this coastal zone and is under the jurisdiction of the California Coastal Commission. A Local Coastal Plan has not been certified for the project area.

The Project is located in an area of historic tidal influence and so is under USACE jurisdiction per Section 10 of the Rivers and Harbors Act. Initial discussions with USACE personnel (Lambert 2004) have identified that the disturbed wetland fringe (pickleweed) may also be considered waters of U.S./adjacent wetlands per Section 404 of the Clean Water Act.

The proposed Project is anticipated to affect the bank of the channel flowing under Road 70 via a 2-barrel culvert. The channel bank is anticipated to be identified as waters of the State by CDFG.

IMPACT DISCUSSION

a, b) As described in detail in the Setting and the Project Description, the project site is located in unpaved roadside and highly disturbed marsh edge.

Special-Status Plants. No special-status plants, besides pickleweed, were observed or would be expected given the disturbed nature of the Project area and past

surveys conducted for the greater wetland area. In the unlikely event that protected plants are discovered during the 2004 Spring survey and preconstruction surveys, coordination with USFWS, CDFG, and CSLC will occur prior to construction and any measures(s) specified to avoid or minimize potential impacts(s) to such species shall be incorporated into the Project.

Pickleweed's importance in the context of the Project is as potential habitat to the Belding's savannah sparrow. The pickleweed in the project area is marginally suitable due to the high level of disturbance and proximity to a roadway and only a small portion will be impacted during Project activities. This includes approximately 300 linear feet (600 sq. ft) along the eastern edge of the northern terminus of Road 70, a patch approximately 20' X 20' (400 sq. ft.) along the northern edge of the western terminus of Rattlesnake Road, and approximately 400 linear feet along the southern edge of the eastern terminus of Rattlesnake Road.

Impacts requiring mitigation are limited to the area along Road 70 and the western terminus of Rattlesnake Road. Up to 600 square feet of pickleweed may be affected by the pipeline relocation along Road 70 (worst case: 1 support every 30 feet, $300' / 50' = 6$ supports, each support up to 10' X 10' disturbance = 10' X 10' X 6 supports = 600 sq. ft. = 0.01 acre). Up to 400 square feet (20' X 20', <0.01 acre) of pickleweed may be affected at the western terminus of Rattlesnake Road at the tie-in location of the relocated pipe to the existing pipeline. This totals approximately 1,000 square feet (0.02 acre) of permanent pickleweed impacts. However, mitigation is not required for pickleweed impacts at the eastern terminus of Rattlesnake Road as these areas have been slated for fill as part of the greater Bolsa Chica Lowlands Restoration Project in order to remove potential mosquito breeding habitat and to isolate the Aera Energy and City pipe racks to reduce the potential for oil spills to enter the restoration areas.

The CSLC and the resource agencies (USFWS, CCC, RWQCB, USACE) have agreed that potential impacts to an approximately 1,000 square feet of pickleweed along Road 70 and the western terminus of Rattlesnake Road will be mitigated by a one-time removal of nonnative iceplant at a ratio of 10:1. Based on the proposed relocation Project footprint, SCG has agreed that approximately 10,000 square feet (0.2 acre) of iceplant will be removed using hand tools at locations identified by the USFWS in Cells 11 and 12 of the Lowlands. A biologist approved by the USFWS will determine the actual construction-related impacts to pickleweed and will verify that the iceplant removal was implemented as prescribed. Impacts to pickleweed are considered less than significant with these measures.

Special-status Wildlife. The presence of Belding's savannah sparrow and western snowy plover onsite is anticipated to be limited to moving through or foraging in the Project area. Although these species have been documented to be nesting within wetland cells adjacent to the project area and the nesting season overlaps with construction in mid-July, (Belding's savannah sparrow mid-February to early August, western snowy plover March 1 to September 14), the Project will not significantly affect nesting activities given the existing traffic and utility maintenance activities along the alignment of the Project.

To further minimize impacts to Special-status Biological Resources to the extent feasible, close coordination with the USFWS construction contractor (during pipeline removal) and the regulatory agencies during all phases of construction will be required to avoid or minimize impacts to onsite biological resources (nesting birds, protected plants), minimize impacts to native pickleweed plants, and to streamline implementation of permit conditions and the construction activities regulated by them. In addition, preconstruction surveys and monitoring will be conducted to avoid or minimize impacts to biological resources on-site, communicate the approved work and pickleweed mitigation area to the crew, and document compliance. As discussed in the Project Description, the following monitoring conditions will be implemented:

- A preconstruction survey for nesting birds prior to construction;
- Tailgate education session for crew prior to construction;
- Flagging of the work area, spoil area, and iceplant removal area;
- A qualified biological monitor will be present during excavation activities to ensure that nesting birds are avoided, pickleweed impacts are minimized, and to document the total extent of the impact to pickleweed associated with work along Road 70;
- In the event nesting birds cannot be avoided, construction will be postponed until after the nesting season is complete; and
- After the excavation phase of construction, biological monitoring will be limited to spot checking as necessary to document permit compliance.

In addition, the proposed Project incorporates mitigation measure BIO-1 from the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS and cited below would be required. Implementation of these standard measures will minimize disturbance to biological resources and reduce impacts to a level that is less than significant.

c, d) The proposed Project involves relocation of a 0.9-mile segment of a natural gas pipeline, Line 1228, out of the restoration area as described in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS. The Project would have a beneficial effect to this wetland area in the long-term as it would remove the pipeline from the wetland area. In addition, an approximately 12'-³ high earthen berm would be constructed between the relocation route of the pipeline and the wetland area as described in the 2001 EIR/EIS, separating the proposed pipeline relocation from the restoration area. Construction for the pipeline relocation would be short-term, and is anticipated to last less than six weeks for the associated removal of the pipeline and the proposed relocation project. Thus, any disturbance would be temporary and minimized using the measures described above in item (a) and (b).

Based on initial discussions with the resource agencies during October-December 2003, the following permits/approvals are anticipated for the proposed Project:

- **CCC Exemption** – Coastal Development Permit (CDP) exemption is anticipated for the proposed pipeline relocation;

- **CDFG** - A Section 1600 *et seq* Streambed Alteration Agreement (SAA) is anticipated to be required for the 2-barrel culvert area at Road 70 within the pipeline relocation portion of the Project. Impacts to the channel bank may occur at this location;
- **USACE** - Coordination with USACE is currently ongoing for guidance with respect to the appropriate permits for the pipeline relocation. NWP 12, (Utility Line Activities), has been identified by USACE staff as appropriate for the Project. The terms and conditions of the NWP 12 compliance will satisfy the requirements of Section 10 of the Rivers and Harbors Act;
- **RWQCB** - A 401 certification will be required if a NWP 12 is necessary. Coverage under NPDES General Permit Order No. R8-2003-0061 (NPDES No. CAG998001), General Waste Discharge Requirements for Discharges to Surface Waters Which Pose an Insignificant (de minimus) Threat to Water Quality is anticipated for any potential dewatering and/or hydrostatic testing required during construction of the relocated portion of the Project.

Receipt of the appropriate CCC, USACE, CDFG, and RWQCB permits, and implementation of the mitigation incorporated in the Project will reduce impacts in jurisdictional areas to a level that is less than significant.

e) The pipeline segment would be relocated to Rattlesnake Road and Road 70. These roads currently support related pipeline structures. Line 1228 would be relocated next to an existing Aera Energy Company pipeline. Project construction would not substantially interfere with movement of wildlife on site. In the long term, the proposed Project would have a beneficial effect as it involves relocating an existing pipeline from wetland areas to an existing utility corridor.

f) The relocation site is located on land now owned by the CSLC. Coordination with the CSLC has confirmed that the Project as described and with the incorporated mitigation is consistent with the approved Restoration Project.

g) The Project does not conflict with the provisions of any conservation plan pertaining to the project site. The proposed pipeline relocation would help implement the Bolsa Chica Lowlands Restoration Project by removing an existing pipeline from the wetland area and realigning it into an existing utility corridor. Thus, it would not conflict with this conservation plan. No impact will occur.

MITIGATION MEASURES

The following mitigation measure from the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS is incorporated into this project:

- **BIO-1** In addition to the water management of pickleweed habitat proposed as part of the project, staging areas, temporary access roads, and all other construction activities should avoid pickleweed habitat to the greatest extent possible.

With the resource protection actions discussed in the Project Description and above, and the measure contained in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, the potential for biological resource impacts would be reduced to a level that is less than significant.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.5 CULTURAL RESOURCES- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource which is either listed or eligible for listing on the National Register of Historic Places, the California Register of Historic Resources, or a local register of historic resources?			X	
b) Cause a substantial adverse change in the significance of a unique archaeological resources (i.e., an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it contains information needed to answer important scientific research questions, has a special and particular quality such as being the oldest or best available example of its type, or is directly associated with a scientifically recognized important prehistoric or historic event or person)?			X	
c) Disturb or destroy a unique paleontological resource or site?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	

SETTING

The 2001 Bolsa Chica Lowlands Restoration EIR/EIS notes that the project site was part of a territory occupied by the Gabrielino and Juaneño Native American groups when the Spanish arrived in 1769. The Gabrielino and Juaneño lived in villages of up to 150 people located near permanent water sources and variety of food resources. Evidence of villages is typically noted by manos and metates (stone grinding tools) for seed processing, bedrock mortars for acorn processing and lithic (stone artifacts) scatters indicating manufacturing or maintenance of stone tools (usually made of chert, a sedimentary rock) used in hunting or butchering. The Spanish government made a few large land grants in the Los Angeles Basin, including Rancho la Zanja in 1784, which covered the area from the San Gabriel to the Santa Ana Rivers and from the Pacific Ocean to the foothills of the San Gabriel Mountains. This large land grant was

divided into six ranchos around 1834, the southwestern portion covering the current project site. This rancho was called Rancho Las Bolsas after the patchwork of grasslands between the marshes and old stream beds. During the late 1800s and early 1900s, the Bolsa Chica Lowlands were used by the Bolsa Chica Gun Club, which leased the drilling rights to the Standard Oil Company of California on the upland portions of Bolsa Chica in 1920 (all from 2001 Bolsa Chica Lowlands Restoration EIR/EIS).

IMPACT DISCUSSION

a, b) A records search was conducted as a part of the 2001 Bolsa Chica Lowlands Restoration EIR/EIS (see Appendix B) and included the Project footprint. The 2001 EIR/EIS identified that no significant cultural resources were located in the Lowlands and that none were anticipated to be uncovered during project implementation due to the historic disturbance within the Project area. These findings from the 2001 EIR/EIS also apply to the proposed Project. Although the records search did not find significant cultural resources in the project site, there is a slight possibility that previously unknown cultural resources could be uncovered. As noted in the 2001 EIR/EIS, construction activities will be monitored full-time by an archaeologist meeting the Secretary of the Interior's standards. Therefore, in the event that a cultural resource is encountered during any phase of the proposed Project, work will be stopped until the find can be assessed by a qualified archaeologist, Native American representative, or County coroner, as appropriate. Implementation of the measures incorporated into the Project Description will reduce potential impacts to a level that is less than significant.

c) As determined in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, there are no unique paleontological resources at the site due to historic disturbance along the project footprint. There will be no impacts to unique paleontological resources at the project site.

d) A records search conducted for the site in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS did not note any evidence that human remains would be found at the site. In the event that any human remains are uncovered at the project site, as noted in the Project Description, the County coroner will be contacted as appropriate. Implementation of the measures incorporated into the Project Description will reduce potential impacts to a level that is less than significant.

MITIGATION MEASURES

Incorporation of the monitoring program by a qualified archaeologist will reduce the potential for impacts to a cultural resource to a level that is less than significant. No significant impacts would result; therefore, no additional mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.6 GEOLOGY AND SOILS- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Inundation by seiche, tsunami, or mudflow?			X	
v) Landslides?			X	
vi) Flooding, including flooding as a result of the failure of a levee or dam?			X	
b) Would the project result in substantial soil erosion or the loss of topsoil?			X	
c) Would the project result in the loss of a unique geologic feature?				X
d) Is the project located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
e) Is the project located on expansive soil creating substantial risks to life or property?			X	
f) Where sewers are not available for the disposal of waste water, is the soil capable of supporting the use of septic tanks or alternative waste water disposal systems?				X

SETTING

Soils at the site are characterized by intertidal and tidal flat sedimentation processes. Surface soils consist of relatively unconsolidated organic clay, loose to medium dense sands and silt and localized peat in many areas of the site as noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS.

IMPACT DISCUSSION

a) As discussed in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, two fault lines can be found in the Bolsa Chica Lowlands: Newport-Inglewood Fault Zone (NIFZ) and its associated North and South branches which extend northwest and southeast across the site, and the Bolsa Fairview fault. The Bolsa Fairview fault and the South Branch of the NIFZ do not appear to be Holocene faults and are not anticipated to cause surface rupture in the project site. The North Branch of the NIFZ is considered active. The potential for ground failure and surface rupture in the Project vicinity would be associated with the North Branch of the NIFZ.

A study was conducted by Woodward and Clyde Consultants in 1987 and 1991 in order to identify the extent of the North Branch fault as a part of the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS. This investigation concludes that future surface fault rupture in the project area will most likely occur in the two parallel step-like main traces of the North Branch fault. The project site is located in the general area of traces of the North Branch fault, as described in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS. Project design, construction, operation and maintenance will meet or exceed safety standards as established in the National Gas Pipeline Safety Act and including:

- Code of Federal Regulations, Title 49 Part 192 - Transportation of Natural and Other Gas By Pipeline: Minimum Federal Safety Standards
- California Public Utilities Commission, General Order No. 112-E State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems
- American Society of Mechanical Engineers' national standard, B31.8-2000 Gas Transmission and Distribution Piping Systems

Incorporation of these requirements into the proposed Project will reduce impacts to a level that is less than significant.

b) As noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, the mesa bluffs that surround the low-lying areas of the project site are moderate to steeply inclined with exposed soils consisting of shallow marine sands and silts which are typically weakly cemented. Soils along exposed faces of the bluffs could be susceptible to various types of erosion due to wave action and heavy rain storms, including sheet-wash, rilling, gullying, and piping which may lead to slope failure. However the project site is not located near the bluffs, which are generally located on the borders of the Bolsa Chica Lowlands to the north and south. Moreover, the pipeline relocation will be aligned along Rattlesnake Road and Road 70, which will be protected from wave action by the levees to be installed as part of the Bolsa Chica Lowlands Restoration Project. Therefore, impacts are considered to be less than significant.

c) The Project is located on Rattlesnake Road and Road 70. These roads do not feature any unique geological features. No significant impact will occur.

d,e) As noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, the potential for liquefaction in the area was investigated in 1990, and it was indicated that the top 30-35 feet of the surface contains sediments that may be classified as liquefiable. If water is encountered during construction, dewatering of the site will occur by either collecting and disposing of water offsite per local, State, and federal regulations or by releasing water onto adjacent vegetated areas for percolation (SCG BMP measure 3-01). Project design, construction, operation and maintenance will meet or exceed safety standards as listed in item (a) above. Incorporation of the required safety measures will reduce impacts to a level that is less than significant.

f) No sewer system is involved in the Project; therefore, no impact will occur.

MITIGATION MEASURES

With incorporation of the safety features discussed above, no significant impacts would result; therefore, no additional mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.7 HAZARDS AND HAZARDOUS MATERIALS- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?			X	
c) Reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Is the project located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

SETTING

“Hazardous material” means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (California Health and Safety Code Section 25501). Natural gas is considered a hazardous material because it is a highly combustible material that has a potential risk of upset during its transportation through pipeline systems. However, natural gas pipelines and their maintenance and safety procedures are highly regulated by the California Public Utilities Commission to assure the safe transport of this energy source. The California Public Utilities Commission regulates the transmission of natural gas under the State guidelines set forth by General Order 112D. All SCG operations are also closely monitored for compliance with the safety standards of the California Occupational Safety and Health Administration.

Since the pipeline relocation site is within an active oil field, the route has been exposed to the potential for local oil spillage from oil pipelines, well field development and routine maintenance activities. Various types of petroleum hydrocarbons have differing degrees of harmful effects on humans and the environment, with the more volatile hydrocarbons (number of carbons in chain in the C5-C8 aliphatics range and C9-C22 aromatics) generally having the most harmful effects. Because these hydrocarbons are volatile, historic oil spillage has generally aged and these more harmful portions of the spilled oil have previously dissipated into the atmosphere.

An Environmental Risk Assessment (ERA) was conducted within the Bolsa Chica Lowlands in anticipation of proposed clean-up, for the Lowlands Restoration Project, to a functioning estuarine system and to improve wildlife habitat (CH2MHill, July 2002). The ERA included extensive soil sampling to determine the possible presence of contaminants throughout this area and to determine contaminant concentrations from oil spillage and other sources that may have adverse ecological effects. Test locations were chosen based on both a random basis and specifically at locations of apparent

spillage or previously known contamination. The latter testing was part of a Confirmatory Sampling Program (CSP) to delineate the extent of on-site contamination and the bounds of needed clean-up efforts. The CSP is ongoing for those areas with the greatest soil contamination; the Project footprint is not within those areas. Testing of soil samples included the following six types of contaminants: metals, total extractable petroleum hydrocarbons (TEPH), polycyclic aromatic hydrocarbons (PAH), volatile organic carbons (VOC), polychlorinated biphenyls (PCBs), organochlorine pesticides and herbicides, and organo-phosphorous insecticides.

Several sites were sampled along the Project alignment. Three sites were found to contain combined values of TPH-Diesel (aliphatic C12-C20) and waste oil (reported as TEPHWO) concentrations in shallow surface samples that exceeded the CSLC cleanup goal of 1,000 parts per million (ppm), with values of 2,900 ppm, 11,700 ppm, and 3,960 ppm. No at depth contamination was found, nor did other constituents of concern that were examined exceed the threshold limits.

IMPACT DISCUSSION

a,b) The Project involves relocating an existing natural gas pipeline, as shown in Figure 2. The relocated pipeline will not be significantly closer to any local residences than the existing pipeline, and the routine transportation of natural gas in this isolated area is not considered to cause a significant hazard to the general public because of the distance of the relocated pipeline from local residences and standard SCG maintenance and operation procedures. In addition, natural gas pipelines are subject to extensive federal and State regulation to ensure that they are maintained properly to reduce risks of gas transport to acceptable levels.

The ERA indicates that some surface soils in the relocation route have been contaminated with petroleum hydrocarbons. All residual soils excavated for footings and not used for backfill or those detected to have contamination will be managed by the USFWS contractor in accordance with federal, State, and local requirements. Material excavated from the footing holes will be temporarily stored at a secure area for confining potentially contaminated material until it is moved into the appropriate final destination determined by the USFWS contractors. As part of the greater Bolsa Chica Lowlands Restoration Project, soil borings and excavations for footings for this Project will be monitored by qualified personnel approved by the USFWS, who will visually inspect the removed soils for adverse staining signs, detectable odors, and using a photoionization detector [PID]. Any such soils suspected of contamination will be segregated and removed for proper management by the USFWS contractor in accordance with federal, State, and local requirements and, if necessary, disposed of at a facility authorized to accept it. Contaminated soils will be evaluated for the extent and nature of contamination and as appropriate disposed of at a facility authorized to accept it. Human health risk during construction is also anticipated to be minimized through implementation of standard Illness Injury and Prevention Plans (IIPP) and General Site Safety Plans by construction crews. SCG Standard BMP 2-05 provides direction for hazardous material management, if such material is encountered discovered during pipeline relocation. In addition, Project design, construction, operation and maintenance

will meet or exceed safety standards as established in the National Gas Pipeline Safety Act and including:

- Code of Federal Regulations, Title 49 Part 192 - Transportation of Natural and Other Gas By Pipeline: Minimum Federal Safety Standards
- California Public Utilities Commission, General Order No. 112-E State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems
- American Society of Mechanical Engineers' national standard, B31.8-2000 Gas Transmission and Distribution Piping Systems

Construction operations will include the need to refuel heavy-duty construction vehicles onsite, and such refueling operations pose the potential for spillage of petroleum fluids. SCG employs standard Best Management Practices (BMPs) to reduce the potential for such operations to result in significant contamination. Per SCG BMP 2-03, refueling in the construction area will be from a vehicle-mounted tank to a backhoe or side boom. The transfer will be continuously monitored by an attendant and spill kits will be available at the fuel transfer site to control incidental spills. Implementation of these standard requirements for soil disposal and safety plans at the site will reduce potential effects to a level that is less than significant.

c) No schools are located within one-quarter mile of the project site. No impacts will occur.

d) The project site is not contained on the most recent "Cortese List" published by the California Department of Toxic Substances Control (2003).

e,f) The Project is not located within an area subject to an airport land use plan or within two miles of a public airport, public use airport, or private airstrip. No impact will occur.

g) The relocated pipeline will be within an existing oil field surrounded by open space and will not affect emergency evacuation or response plans that are implemented for urban land uses on public roads and highways. No impact will occur.

h) The surrounding saltmarsh vegetation and open flats pose little threat of wildfire because of the succulent nature of the vegetation and its low growth form which provides only small amounts of fuel. No impact will occur.

MITIGATION MEASURES

No significant impacts would result; therefore, no additional mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.8 HYDROLOGY AND WATER QUALITY- Would the project:				
a) Violate Regional Water Quality Control Board water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to control?			X	
f) Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
g) Place within a 100-year floodplain structures which would impede or redirect flood flows?				X

SETTING

As noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, the general Lowlands area is part of a semi-enclosed coastal body of water, and consists of a series of diked, nontidal ponds and Bolsa Bay, the latter of which is partially open to tidal waters. Stormwater and urban runoff are discharged to the waters in the Bolsa Chica Lowlands through the East Garden Grove-Wintersburg (EGGW) Flood Control Channel and the Springdale Pump Station. The Springdale Pump Station drains dry and wet weather runoff from Lake Signal, the Freeman Creek drainage, the Seacliff culvert, and runoff from Pacific Coast Highway.

IMPACT DISCUSSION

a) The Project will not, in the long-term, adversely affect water quality. Temporary construction activity may result in short-term increases in erosion and sedimentation, which could potentially affect surface water quality over the six-week construction period.

As discussed previously, the Project will comply with the Santa Ana District of the California Regional Water Quality Control Board (RWQCB) water quality standards and waste discharge requirements. If water is encountered during construction, dewatering of the site will occur by either collecting and disposing of water offsite per local, State, and federal regulations or by releasing water onto adjacent vegetated areas for percolation (SCG BMP measure 3-01 from Project Description). Approval from RWQCB will be received prior to any discharge and the RWQCB permit, Order Number R8-2003-0061 National Pollution Discharge Elimination System (NPDES) Number CAG998001, General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimus) Threat to Water Quality, will be followed.

Hydrostatic testing of the new pipeline could also involve the discharge of water into the waters of the Bolsa Chica Lowlands. Prior to any discharge, any water used for hydrostatic testing will be tested to ensure that the water meets local, State, and federal water quality standards. If necessary, the water will be processed and retested. The source water used for the hydrostatic test will be potable water from the city of Huntington Beach. Discharge of the hydrostatic test water may be on site to the tidal channels or the water will be discharged into Baker tanks and hauled off site for disposal, depending on water quality and specific waste discharge requirements. In the event discharge to tidal channels is pursued, the appropriate approval from RWQCB will be acquired prior to discharge. The RWQCB permit discussed above is anticipated to be followed.

As discussed in the Project Description, erosion control/sedimentation Best Management Practices (BMPs) will be implemented during the project to control dust and sedimentation impacts to coastal waters during construction. SCG implements standard BMPs per the Water Quality and Construction Best Management Practice Handbook, December 2002). BMPs anticipated to be used include the following (see Appendix C for details):

- Placement of sand bags around the excavation trench and material stockpiles, and covering of stockpiled materials if stockpiles are to be left overnight or for a period of 12 hours or more. Sand bags shall be removed when Project is completed. (SCG BMP 1-05);
- No construction materials, debris, waste, oil, or liquid chemical shall be placed or stored where it may be subject to wind, rain, wave, or tidal erosion or dispersion. (SCG BMP 2-01 through 2-08);

- Nonessential machinery or construction materials shall not be allowed at any time in wetland areas. (SCG BMP 3-08 and 4-01);
- All stockpiles and construction materials shall be covered, enclosed on all sides, and shall not be stored in contact with the soil. Spoil piles will be placed directly adjacent to the excavation area on roadway or upland areas that are vegetated with nonnative iceplant. Areas where pickleweed is present will be avoided. (SCG BMP 1-08 and 2-01);
- Any and all debris resulting from the construction activities shall be removed from the site within 24 hours of completion of construction to prevent the accumulation of sediment and other debris that may be discharged into coastal waters. Specific lay down areas outside of the construction area will be designated to contain debris and pipe for future proper disposal. (SCG BMP 2-01 and 2-04);
- Sediment from the wetlands other than the material generated to uncover the buried pipeline shall not be used for construction material; and
- All debris and trash shall be disposed of in the proper trash and recycling receptacles at the end of each construction day. (SCG BMP 2-04).

Incorporation of these standard BMPs will reduce impacts to a level that is less than significant.

b) Project construction will not disturb or use any groundwater from the project site. If water is to be used on site for dust mitigation purposes, or for hydrostatic testing of the pipeline as described in the Project Description, the water will be supplied by a water truck using potable water from the city of Huntington Beach. Significant impacts will not occur.

c) The Project involves relocation of a pipeline to Rattlesnake Road and Road 70, as shown in Figure 2. The Project will have a less than significant impact on existing drainage patterns on the site as the pipeline will be situated upon supports or underground. It should be noted that the Bolsa Chica Lowlands Restoration Project includes installation of earthen berms approximately 12 feet high that will be constructed between the restoration area of the Bolsa Chica Lowlands and the Project site as shown in Figure 3. The purpose of these berms is to separate the pipeline equipment and elevated roads such as Rattlesnake Road and Road 70 from the influence of the tidal flows that will be restored as a part of the Bolsa Chica Lowlands Restoration Project. Although the earthen berms would likely change drainage patterns at the project site, it will not result in changes that will cause substantial erosion or siltation on or off the site. Impacts will be less than significant.

d, e) The relocated pipeline will be placed primarily upon supports with some small segments located underground. The proposed pipeline will not result in any increase in impervious surface area and thus will not increase the rate of amount of surface runoff. Drainage on the site will continue to follow the existing conditions. Impacts will be less than significant.

f) The Project involves relocation of a pipeline to Rattlesnake Road and Road 70. It does not involve housing and will not alter flood conditions in the area.. No impacts will occur.

g) The Project will involve realigning a 0.9 mile segment of pipeline to Rattlesnake Road and Road 70. One of the objectives discussed within the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS is the removal of manmade structures from the area of the Lowlands designated for restoration. The current proposal will aid in implementing this objective. Furthermore, the pipeline will be located on supports with short portions to be located underground. It will not impede or redirect flood flows. No impacts will occur.

MITIGATION MEASURES

No significant impacts would result; therefore, no additional mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.9 LAND USE AND PLANNING- Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?			X	

SETTING

The Project involves the relocation of a 0.9 miles segment of a natural gas pipeline to Rattlesnake Road and Road 70, interior roads within the Bolsa Chica Lowlands. The project site is within the Bolsa Chica Lowlands Restoration Project area, on public land under the jurisdiction of CSLC and within the unincorporated area of Orange County. While located on public land, access roads within the project site, Rattlesnake Road and Road 70, are leased to public utility companies and closed to the public. Land uses in the area adjacent to the Bolsa Chica Lowlands include residential areas to the north, east and south. The Pacific Coast Highway and Bolsa Chica State Beach border the Project to the west

IMPACT DISCUSSION

a) The project site is located along interior utility access roads within the Bolsa Chica Lowlands. As such, the proposed pipeline relocation will not divide any established community. No impacts will occur.

b) The project site is owned by the California State Lands Commission and also under jurisdiction of the California Coastal Commission (CCC) as the project site is within the Coastal Zone. In addition, the wetland fringe is under jurisdiction of the United States Army Corps of Engineers (USACE) as this area is classified as waters of the U.S. and historic tidal area. The channel spanned by the pipeline relocation alignment is under jurisdiction of the California Department of Fish and Game (CDFG). Permitting relevant to the removal of Line 1228 in the Phase I area has been completed as part of the greater Lowlands Restoration Project and includes the following: CCC Final Consistency Determination (CD-061-01, January 8, 2002), USACE Section 404 (9700-193000-RLK, August 14, 2002) and Regional Water Quality Control Board (RWQCB) 401 Certification (April 23, 2002). Impacts of the associated removal of the pipeline segment are discussed under the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS. The proposed Project will comply with the required measures and standards as described and will have a less than significant impact, as the Project involves a pipeline relocation that will not alter the land use in the area; and furthermore, the Project will help implement the Restoration Project. Impacts will be less than significant.

c) As discussed in Section 3.2.4, Biological Resources, and in Item b above, the proposed Project will not conflict with any Habitat Conservation Plan or Natural Community Conservation Plan. Impacts will be less than significant.

MITIGATION MEASURES

No significant impacts would result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.10 MINERAL RESOURCES- Would the project:				
a) Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

SETTING

The Lowlands have been used for natural gas and oil production since the early 1900s. Land, including the project site, in the Lowlands are leased by Aera Energy and

Southern California Gas Company. Line 1228 currently receives gas from natural gas producers (AERA Energy and Nuevo Energy Corporation) and transports it to electric generating plants (Los Alamitos and Huntington Beach).

IMPACT DISCUSSION

a-b) The proposed pipeline relocation will allow for the continued recovery of natural gas from the area. The Project will continue to facilitate the production of natural gas at the Bolsa Chica site. The Project will involve only the relocation of an existing pipeline segment. The existing pipe will be dismantled and removed (this project was covered by the Final EIR/EIS for the Bolsa Chica Lowlands Restoration Project). No impacts will occur.

MITIGATION MEASURES

No significant impacts will result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.11 NOISE - Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?				X

SETTING

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual

sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers duration as well as sound power level is the equivalent noise level (Leq). The Leq is defined as the steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual time-varying levels over a period of time. Typically, Leq is summed over a one-hour period.

Noise levels are measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Decibels cannot be added arithmetically, but rather are added on a logarithmic basis. A doubling of sound energy is equivalent to an increase of 3 dB. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes are generally not perceived. Typical ambient sounds range from 30 dBA (very quiet) to about 85 dBA (very loud). Typical exterior ambient noise levels away from obvious noise sources are about 50 to 55 dBA. Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

Various federal, State and local regulations apply to noise exposure. As noted in the greater Lowlands area in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, stationary and nuisance noise is administered through the Huntington Beach Municipal Code. Although the Lowlands are in an unincorporated area of Orange County, the nearest sensitive receptors, the residential area surrounding the project site to the north, east and south, are located within the city of Huntington Beach, as shown in Figure 1. Thus, the Huntington Beach Municipal Code is used as a threshold in the 2001 EIR/EIS for the Restoration Project and is also discussed in this study. The Code recognizes that construction noise sources are not strictly related to a 24-hour community noise standards; therefore, the Huntington Beach Municipal Code, Chapter 8.40, "Noise Control", states that noise sources associated with construction, repair, remodeling, or grading of any real property are exempt from the 60 dBA City-mandated noise criteria provided a permit has been obtained and said activities do not take place between 8:00 pm and 7:00 am on weekdays, including Saturday or any time on Sunday or a federal holiday.

IMPACT DISCUSSION

a-d) As stated above, the Huntington Beach Municipal Code, Chapter 8.40, temporary construction projects that have obtained a permit are exempt from the City-mandated

noise ordinance. As the Project involves short-term construction, the Project will comply with the Huntington Beach Municipal Code regarding temporary noise. In addition, the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS noted that, with respect to noise generated by haul trucks, the number of construction vehicles needed for pipeline removal would raise noise levels along major routes by less than 1 dB, which is less than the 5 dB criterion used by the County of Orange for traffic noise. Typical noise levels for equipment at construction sites are shown in Table 2.3.11-1. As described above, noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources such as construction equipment. As a result, noise levels at the closest residential area approximately 2,000 feet (0.4 miles) away would be attenuated to about 56 dBA for the highest volume construction equipment. This is below the required 60 dBA threshold considering that the nearest sensitive receptors, the residential area to the northeast of the project site, are over 2,000 feet (0.4 miles) distant at the closest point. The Project will comply with the noise ordinance of the city of Huntington Beach; incorporation of mitigation measure N-1a will reduce impacts to a level that is less than significant.

Table 2.3.11-1 Typical Noise Level Ranges at Construction Sites

Construction Phase	Average Noise Level at 50 Feet	
	Minimum Required Equipment On-Site	All Pertinent Equipment On-Site
Clearing	84 dBA	84 dBA
Excavation	78 dBA	88 dBA
Foundation/Conditioning	88 dBA	88 dBA
Laying Subbase, Paving	78 dBA	79 dBA
Finishing and Cleanup	84 dBA	84 dBA

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, 1971.

e, f) The project site is not located within an airport land use plan or within two miles of a public airport of public use airport or within the vicinity of a private airstrip. No impact will occur.

MITIGATION MEASURES

The following mitigation measure from the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS will apply:

N-1a Haul truck traffic shall be restricted to those hours designated for site construction i.e., 7:00 am to 8:00 pm Monday through Saturday.

With the incorporation of the recommended measure and the measures contained in the 2001 Bolsa Chica Lowlands EIR/EIS, the potential for noise impacts will be reduced to a level that is less than significant.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.12 POPULATION AND HOUSING- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

SETTING

The proposed Project is located in the Bolsa Chica Lowlands, which is in an unincorporated area of Orange County. Existing residential neighborhoods lie to the north, east and south of the Lowlands, at a distance of over 2,000 feet from the project site at the closest point. These residential areas are all within the boundary of the city of Huntington Beach.

IMPACT DISCUSSION

a) The proposed Project involves the relocation of an existing 0.9-mile segment of Line 1228 which transports natural gas from natural gas producers (AERA Energy and Nuevo Energy Corporation) to electric generating plants (Los Alamitos and Huntington Beach). The Project will not involve any new homes or businesses and will thus involve no new population. No new roads will be developed as a part of this Project. The Project will not extend utility access or increase the capacity of the pipeline; the Project will not induce population growth in the area. No impacts will occur.

b) The pipeline relocation Project will be located on Rattlesnake Road and Road 70 which are existing private roads on the interior of the Bolsa Chica Lowlands, as shown in Figures 1 and 2. The Project will not displace existing housing. No impacts will occur.

c) As noted above, the Project will be located on Rattlesnake Road and Road 70, which are existing utility access roads, in the interior of the Bolsa Chica Lowlands. The Project will not displace any persons. No impacts will result.

MITIGATION MEASURES

No significant impacts will result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.13 PUBLIC SERVICES- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?			X	

SETTING

The Bolsa Chica Lowlands are located within the unincorporated area of Orange County. The closest municipality is the city of Huntington Beach. The residential areas that border the Lowlands to the north, east and south are within the boundaries of the city of Huntington Beach. Emergency services at the site are provided by the city of Huntington Beach. Huntington Beach Union High School District and Huntington Beach City School District serve the residential areas nearest to the Project site. The Bolsa Chica Ecological Reserve is located within the Lowlands to the northwest of the Project site. The Bolsa Chica State Beach is located across PCH from the Lowlands. Vector control is performed at the site by the Orange County Vector Control District.

IMPACT DISCUSSION

a, b) The proposed Project involves the relocation of a natural gas pipeline. As such, it will not generate population or increase demand for fire or police service in the long term. Project construction could temporarily disrupt emergency access to the site. However, construction is anticipated to last less than six weeks and will occur on utility access roads maintained by the utility companies using these roads. Thus, there will be no significant impacts to fire or police service.

c) The proposed Project involves relocation of an existing pipeline. The proposed relocation will not directly affect any existing school. In addition, as noted in items (a), and (b), the Project will not generate any residents and thus will not increase the student population in the area. The Project will have no impact on schools.

d) As noted above, the Project will not involve any new population at the Project site and will not increase use and demand for parks. The Project is located approximately one half mile from the Bolsa Chica Ecological Reserve. Bolsa Chica State Beach is located across PCH from the greater Lowlands area. No impacts will occur.

e) The proposed Project involves relocation of an existing pipeline. As noted in the 2001 Restoration Project EIR/EIS, vector control is implemented at the site by helicopter. Thus, the proposed pipeline relocation will not affect this public service.

MITIGATION MEASURES

No significant impacts will result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.14 RECREATION- Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X

SETTING

The Bolsa Chica Lowlands are located adjacent to the Bolsa Chica State Beach. An approximately 1.5 mile recreational trail is located in the Bolsa Chica Ecological Reserve approximately one half mile northwest of the Project site. The Ecological Reserve is accessible from PCH.

IMPACT DISCUSSION

a) The proposed pipeline relocation Project involves the realignment of a 0.9 mile segment of Line 1228 along Rattlesnake Road and Road 70, interior private roads within the Bolsa Chica Lowlands area that are not accessible to the general public. The Project will involve no new housing or commercial development and thus will involve no increase in population. The Project will not create any additional demand for recreational facilities and will help implement the proposed Bolsa Chica Lowlands Restoration Project. As such, no recreation impacts will occur.

b) As noted in item (a), the Project will not involve any new population and will not require construction or expansion of recreational facilities. Thus no impacts will result.

MITIGATION MEASURES

No significant impacts will result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.15 TRANSPORTATION/TRAFFIC- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		X		
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?		X		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

SETTING

As described in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, the main access road for the utility roads on the project site is the intersection of Seapoint Avenue and PCH. Primary roadways in the area include PCH, Warner Avenue, Goldenwest Street, Talbert Avenue, Ellis Avenue, Garfield Avenue, Edwards Street and Seapoint Avenue.

IMPACT DISCUSSION

a, b) Construction for the proposed Project is anticipated to last less than six weeks for both the removal and the proposed relocation of the pipeline. The Project is anticipated to involve two crews of employees and approximately 8 vehicles per day. The intersection of Seapoint and PCH, the main access point for the Project, is within the boundary of the city of Huntington Beach. The city of Huntington Beach requires that Level of Service, (LOS) D or better be maintained on all Congestion Management Plan (CMP) roadways. Within the greater lowlands project area, Warner Avenue, Beach Boulevard and PCH are CMP roadways. The 2001 EIR/EIS found that for the cumulative project scenario, four intersections listed as CMP roadways would operate over the city of Huntington Beach LOS, including the intersection of PCH and Seapoint Avenue. Although the proposed Project will not affect levels of service in the long term, traffic could be disrupted during the six-week construction period. The 2001 Restoration

Project EIR/EIS includes two mitigation measures that will apply to these roadways, Mitigation Measures T-1 a and b. These mitigation measures would reduce potential impacts from construction traffic on local residents for the intersection of Seapoint Avenue and PCH to a less than significant level. In addition, coordination between AERA Energy, SCG and the resource agencies would occur over the duration of construction to minimize impacts to traffic movement. Access along Rattlesnake Road and Road 70 would not be significantly affected as half the width of the road would remain open to traffic throughout the construction period. Roads intersecting the project site are also anticipated to remain open during construction. Any road closures necessary (such as when the pipeline route crosses a road) will be coordinated with AERA Energy and SCG to minimize disruption to ongoing maintenance activities. Incorporation of the mitigation measures from the 2001 Restoration Project EIR/EIS listed below as T-1a and b would reduce impacts to a level that is less than significant.

c) The proposed Project would involve relocation of a pipeline and would not involve a change in air traffic patterns. No impact would occur.

d) The proposed Project would not change any design features of Rattlesnake Road or Road 70. These roads would continue to be used for access and maintenance of the pipeline infrastructure that already exists on Rattlesnake Road and Road 70. Project implementation would not create any traffic hazards and impacts would be less than significant.

e) As noted in item (a) above, coordination between AERA Energy, SCG and the resource agencies that are managing the contractors for construction work would minimize impacts to traffic movement along Rattlesnake Road and Road 70. Access is not anticipated to be significantly affected as half the width of the road would be open to traffic throughout construction. Any road closures necessary (such as when the pipeline route crosses a road) would be coordinated with AERA Energy and SCG to minimize disruption to ongoing maintenance activities. Impacts to emergency access would be less than significant.

f) The existing pipeline is proposed to be relocated to Rattlesnake Road and Road 70. These roads are utility access roadways used by AERA Energy and SCG for access to the pipeline infrastructure located in the area. In addition, CSLC, CDFG and USFWS also use the project site for monitoring activities. There are no public parking spaces at the project site. Construction vehicle parking would occur in the designated lay down area or on the work strip as appropriate. Lay down areas at the site are storage or work areas that were a previously disturbed site or area of non-native vegetation used to support routine operations of the existing oil field. Construction equipment would be left overnight at the site as feasible, or at other existing off-site storage areas. No impact to parking capacity will occur.

g) The Project would involve temporary construction activity, and would not affect alternative transportation policies such as bus turnouts or bicycle racks. No impacts are anticipated.

MITIGATION MEASURES

The following mitigation measures from the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS are incorporated into the proposed Project:

- T-1a** Project construction shall employ an access plan consisting of flaggers or temporary signalization.
- T-1b** A traffic control plan shall be developed and implemented to show the signage designating the area and alerting motorists to trucks entering PCH. The use of flaggers may be appropriate to handle trucks entering the site during daytime hours.

Incorporation of the above measures will reduce potential traffic impacts during construction to a level that is less than significant.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.16 UTILITIES AND SERVICE SYSTEMS- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Are sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Has the wastewater treatment provider which serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and, does the project comply with federal, state, and local statutes and regulations related to solid waste?				X

SETTING

The Bolsa Chica Lowlands are located within the unincorporated area of Orange County. The closest municipality is the city of Huntington Beach. As noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, the Project is located within the service area of the Orange County Water District (OCWD) and the Municipal Water District of Orange County (MWDOC). Existing water service in the general area of the project site consists of nonpotable water distribution facility operated by Aera Energy and is currently used by Aera Energy for onsite oil operation. The general project area is not within the jurisdictional boundaries of a local wastewater management agency. Residential areas surrounding the Bolsa Chica Lowlands are served by the city of Huntington Beach and the Sunset Beach Sanitary District, which is within the County Sanitation Districts of Orange County. The project site is within the service area of Southern California Edison. Electricity is available to the project site from electrical lines located along Seapoint Street. Natural gas is also available from the 4" high-pressure main located at Warner Avenue and Bolsa Chica Street as well as connections from Warner and Slater Avenues. Solid waste generated in the project area is collected by Rainbow Disposal and taken to the County transfer station.

IMPACT DISCUSSION

- a) The proposed Project will involve the realignment of an existing pipeline and will involve short-term construction. If water is encountered during trenching, dewatering of the site will occur by either collecting and disposing of water offsite per local, State, and federal regulations or by releasing water onto adjacent vegetated areas for percolation (SCG BMP measure 3-01). Coordination with (RWQCB) for the appropriate approvals will occur prior to any discharge. NPDES General Permit Order No. R8-2003-0061 (NPDES No. CAG998001), General Waste Discharge Requirements for Discharges to Surface Waters Which Pose an Insignificant (de minimus) Threat to Water Quality will be followed in this event and all conditions associated with this permit will be implemented. Impacts will be less than significant.
- b) The proposed pipeline relocation Project will involve no new residential development or involve any new population and thus will not increase water demand or wastewater generation. As such, it will not require any expansion of water or wastewater treatment facilities. No impacts will occur.
- c, e) The proposed pipeline relocation will not result in the construction of new storm water drainage facilities or expansion of existing facilities. As discussed in Section 2.3.8, Hydrology and Water Quality, the Project will not alter drainage patterns in the area. No impacts will occur.
- d) Any water used at the site during construction will be provided by water truck using potable water from the city of Huntington Beach. In the long term, the proposed pipeline relocation will not generate demand for water. No impacts will occur.
- f) As noted in the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, solid waste generated in the Project area is collected by Rainbow Disposal and taken to the County

transfer station. The project will involve short-term construction activity, but will not generate any solid waste in the long term; impacts to solid waste collection and disposal will therefore be less than significant.

MITIGATION MEASURES

No significant impacts would result; therefore, no additional mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.17 ENVIRONMENTAL JUSTICE- Would the project:				
a) Have a potential to disproportionately impact minority and/or low-income populations at levels exceeding the corresponding medians for the County(ies) in which the project is located.				X
b) Result in a substantial decrease in the employment and economic base of Orange County that can be shown to disproportionately impact minority and/or low-income populations.				X

Background

On February 11, 1994, President Clinton issued an “Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and promote non-discrimination in programs and projects substantially affecting human health and the environment (White House, 1994). The order requires the U.S. Environmental Protection Agency (EPA) and all other federal agencies (as well as State agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations. In 1997, the U.S. EPA’s Office of Environmental Justice released the *Environmental Justice Implementation Plan*, supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. Federal agencies received a framework for the assessment of environmental justice in the EPA’s *Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analysis* in 1998. This approach emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

While many State agencies have utilized the EPA’s *Environmental Justice Implementation Plan* as a basis for the development of their own environmental justice strategies and policies, as of yet the majority of California State agencies do not have

guidance for incorporation of environmental justice impact assessment into CEQA analysis. The State Air Resources Board has, for example, examined this issue and has received advice from legal counsel, by a memorandum entitled "CEQA AND ENVIRONMENTAL JUSTICE". This memorandum states, in part, "For the reasons set forth below, we will conclude that CEQA can readily be adapted to the task of analyzing cumulative impacts/environmental justice whenever a public agency (including the Air Resources Board (ARB), the air pollution control districts, and general purpose land use agencies) undertakes or permits a project or activity that may have a significant adverse impact on the physical environment. All public agencies in California are currently obliged to comply with CEQA, and no further legislation would be needed to include an environmental justice analysis in the CEQA documents prepared for the discretionary actions public agencies undertake. Under AB 1553, signed into law in October 2001, the Governor's Office of Planning and Research (OPR) is required to adopt guidelines for addressing environmental justice issues in local agencies' general plans. Currently, the OPR is in the process of updating the General Plan Guidelines to incorporate the requirements of AB 1553.

California State Lands Commission Policy

The California State Lands Commission (CSLC) has developed and adopted an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures. The CSLC adopted an amended Environmental Justice Policy on October 1, 2002, to ensure that "Environmental Justice is an essential consideration in the Commission's processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities." The policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs which is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations. This discussion is provided in this document consistent with and in furtherance of the Commission's Environmental Justice Policy. The staff of the CSLC is required to report back to the Commission on how environmental justice is integrated into its programs, processes, and activities (CSLC, 2002).

SETTING

The pipeline relocation Project is located on Rattlesnake Road and Road 70, as shown in Figures 1 and 2. The nearest residences are about 2,000 feet northeast of the Project site. As shown in Figure 1, the area surrounding the Lowlands is highly urbanized and largely developed with housing and commercial uses as well as existing oil, gas and electricity infrastructure. The surrounding residences consist of higher income residential housing.

IMPACT DISCUSSION

a) The proposed Project involves the relocation of a 0.9 mile segment of an existing natural gas pipeline to Rattlesnake Road and Road 70, as shown on Figure 2. The

Project will involve short-term construction activity and installation of a new pipeline. The Project will have no impact on minority or low-income populations.

b) The proposed pipeline relocation could generate temporary construction jobs and will not affect the employment or economic base in the area. No impacts will occur.

MITIGATION MEASURES

No significant impacts to Environmental Justice would result; therefore, no mitigation is required.

ISSUES:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.3.18 MANDATORY FINDINGS OF SIGNIFICANCE- Would the project:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a) Based upon the analysis herein, it has been determined that the proposed Project, as designed, will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. As discussed in Section 2.3.4, Biological Resources, potential impacts to western snowy plovers and Belding's savannah sparrow will be less than significant with

the implementation of standard SCG BMPs and mitigation measure involving avoidance of pickleweed.

b) This Project involves replacement of an existing pipeline. It will not contribute to any cumulative effects.

c) The Project will not have significant environmental effects that would cause substantive adverse effects on human beings, either directly or indirectly. Incorporation within the proposed Project of standard safety measures and mitigation measures applicable from the 2001 Bolsa Chica Lowlands Restoration Project EIR/EIS, as discussed in Sections 2.3.6, Geology and Soils, Section 2.3.7, Hazards and Hazardous Materials, Section 2.3.11, Noise, and Section 2.3.15 Transportation will reduce impacts to a level that is less than significant.

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DEFINITIONS AND ACRONYMS

AAQS	Ambient Air Quality Standards
APCD	Air Pollution Control Board
AQMP	Air Quality Management Plan
ARB	Air Resources Board
BMP	Best Management Practice
CAA	Clean Air Act
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CCC	California Coastal Commission
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CMP	Congestion Management Plan

CNEL	Community Noise Equivalent Levels
CO	Carbon Monoxide
CSP	Confirmatory Sampling Program
CSLC	California State Lands Commissions
dBA	Decibels
DOT	Department of Transportation
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
IIPP	Illness Injury and Prevention Plan
IS/MND	Initial Study / Mitigated Negative Declaration
LOS	Level of Service
MLLW	Mean Lower Water Level
MMP	Mitigation Monitoring Program
MSL	Mean Sea Level
MWDOC	Municipal Water District of Orange County
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NIFZ	Newport-Inglewood Fault Zone
NOx	Nitrogen Oxides
NPDES	National Pollution Discharge Elimination Standards
OCWD	Orange County Water District
OEHHA	Office of Environmental Health Hazard Assessment
Pb	Lead
PCB	Polychlorinated Biphenyls
PCH	Pacific Coast Highway
PM ₁₀	Particulate Matter 10 microns in size
PM _{2.5}	Particulate Matter 2.5 microns in size
PPM	Parts per million
ROC	Reactive Organic Compounds
ROG	Reactive Organic Gases
ROW	Right of Way
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SCAB	South Coast Air Basin
SCAPCD	South Coast Air Pollution Control District
SCAQMD	South Coast Air Quality Management District
SCG	Southern California Gas
SHPO	State Historic Preservation Office
SO ₂	Sulfur Dioxide
TEPH	Total Extractable Petroleum Hydrocarbons
TPH	Total Petroleum Hydrocarbons
USEPA	United States Environmental Protection Agency
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
VOC	Volatile Organic Compounds

WO

Waste Oil